Coax A/V Agile Demodulator Tuner W/IR Remote Control



User Manual

(Model: RFDM2-PDK)



RFDM2-PDK Demodulator with IR Remote

1. Product Features:

This coax to composite A/V demodulator is a professional grade PAL D/K TV channel converter, designed to work with coax TV signals such as cable TV or satellite channels, closed circuit private TV channels or other RF modulated signals to standard video/audio in composite RCA formats for various applications such as displaying, recording, or further A/V broadcast and distribution.

Easy 1-Minute setup. Simply connect the coax cable from your source to the coax input of this converter and then use regular composite A/V cable to connect from the standard video /audio output of this coax converter in RCA type to a TV display. No initial configuration setup needed. No TV channel scan needed.

The operation of this coax video audio converter is 100% hardware operation. Easy cable setup and no compatibility issues.

This coax cable signal agile demodulator can also be used a stand alone TV tuner. Featured with support of full TV channel frequencies and the micro processor inside the unit can decode all standard UHF/VHF TV, CATV and satellite channels.

This external TV tuner can be fully operated and controlled via the supplied IR remote controller or the manual push buttons on the front panel of the unit, just like the way you were using the TV remote to flip between channels, mute the TV sound or up the volume.

This unit is compact in size and it is rack mountable if needed for large-scale broadcast TV system or surveillance camera CCTV setup. Multiple units can

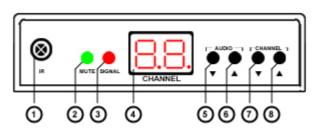


be daisy chained together on 19" rack using the optional rackmount kits. Rackmount kits are sold separately.



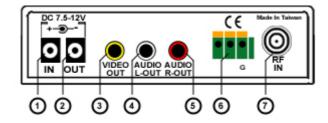
2. Introduction:

Front Panel



- 1. IR: IR remote sensor/receiver
- 2. **MUTE:** Shut off the audio channel
- 3. **SIGNAL:** The LED lit on for indication of unit engaging in channel switching.
- CHANNEL: LED screen for displaying the current TV channel number selected.

 Rear Panel
- 5. **AUDIO** ▼: Volume down (level:16-0)
- 6. **AUDIO** ▲: Volume Up(level:0-16)
- 7. **CHANNEL**▼: Channel down
- 8. CHANNEL▲: Channel up



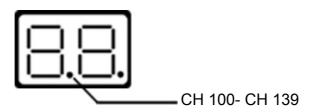
- 1. **Power IN:** DC 7.5 ~ 12V 300mA
- 2. **Power OUT:** Power Loop-Through
- 3. **VIDEO OUT:** Composite Video output
- 4. AUDIO L-OUT: Stereo left audio out
- 5. AUDIO R-OUT: Stereo right audio out
- 6. **Terminal Block:** Optional use for RS485
- 7. **RF IN:** RF coax input



3. Installation:

- (1)RF Signal Input
- (2) Video Output to Monitor
- (3) Audio Output to speaker
- (4)DC 7.5 ~ 12V 300mA Power Supply

4. LED Channel Display:



For higher TV channel number in 100+ (3 digit display), the channel LED screen will display with a "dot" between the 2 digits displayed on the panel. The "dot" represents the base of 100. So if you see "2.3" on the Channel LED screen, it actually means Ch123 (100 + 23).

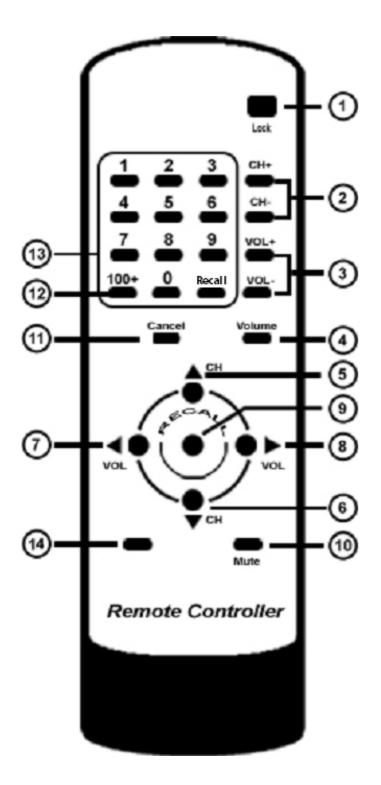
For example:

LED Display	Description
∃*	CH 13
1.∃∗	CH 113





5. Remote Controller Panel:



1. Lock:

Lock/Unlock specific channel (work with)

2. Channel Up/Down:

CH+: Fast switching channels up CH -: Fast switching channels down

3. Volume Up/Down: VOL+: Volume up

VOL -: Volume down

4. Volume: Volume level display

5. CH ▲: TV channel up

6. CH ▼: TV channel down

7. **VOL◄:** TV volume down (Volume level

range : 16 ~ 0)

8. VOLD: TV Volume up

9. **RECALL:** Return to the previous TV

channel selected

10. Mute: Mute the TV sound

11. Cancel: For re-entry

12. 100+: Set for higher channel number 100+

13. Numerical Key Pad: For manually entering

TV channel number

14. Channel Delete: Select specific TV

channel to be skipped/hidden





6. Remote Controller:

- (1) After installation, you can switch channel by remote controller.
- (2) For CH 02 ~ CH99, please enter 2 numbers.

ex. : CH 03 → press 0 and 3 CH 30 → press 3 and 0 when you switch channel, the "signal" light is on.

(3) For CH 100 or more, please press 100+ button then 2 numbers.

LED Display	Description
0.0*	CH 100

LED Display	Description
l.□ _*	CH 110

7. Channel Add / Delete (only by remote control):

(1) Press , you will see channel number start flashing.

LED Display	Description
\ <u>`</u> '_'.	Flashing channel number means that it is in
`> *_	setting mode.

(2) Tune to the channel number that needs to be skipped/hidden from other users:

With CH▲, CH▼ or using numerical keys from the remote controller.





(3) Press ① button from the remote controller to lock and confirm.

LED Display	Description
-`\$ <u>`</u> \$	no "dot", this channel is deleted
->>,\z\:\tau_	If you want the hidden channel back, just press ① again. You can see a " dot " there.

(4) Press (4), setting is completed.



VHF/UHF Setup

The default setting for our RFDM2 is for CATV channel range. To reset RFDM2 unit for VHF/UHF air TV channels. Please follow the steps below:

1. Power on the RFDM2 unit first. The LED screen on the front will display the system status in "nC" or "nA". The factory default of each RFDM2 is set for "nC".

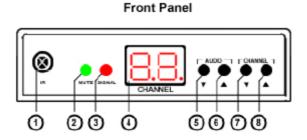
nC : standing for CABLE cannel systemnA : standing for AIR channel system

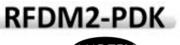
- **2.** Press and hold the <u>CHANNEL Down</u> button for 10 seconds (do not release the button). Wait until the LED digit screen starts to flash, then release the button.
- **3.** Once the LED screen starts to flash, RFDM2 unit will display "**01**" flashing alternatively, which means that the unit is ready for new setup.

At this time please press the <u>CHANNEL Down</u> or <u>CHANNEL UP</u> button from the front panel to adjust change the value on the LED screen. There will be only two, "01" and "02".

01 for "**nC**" >>>>>> CABLE TV System
02 for "**nA**" >>>>>>> VHF/UHF, Air TV Channels for analog antenna

- **4.** After the adjustment, press and hold the <u>CHANNEL Down</u> button for 10 seconds or wait until the LED digits stops flashing, then release the button.
- **5.** Power off the RFDM2 unit and plug the power supply back on again to confirm if the new setting is effective and displaying "**nA**" for the new system status.







Specification	
Channel Display	Digital LED Channel Display
Channel	CATV - PAL D/K system (Ch1 to Ch100)
Frequency Range	48.25 - 869.75MHz
Input Level Range	-5 ~ +30 dbmv
Video Output Level	1Vp-p ± 0.2Vp-p (75 ohm)
	RF Input : " F " type, Female
	Composite Video Output : RCA Jack
Connector	Stereo Audio L-Output : RCA Jack
	Stereo Audio R-Output : RCA Jack
	DC Power IN / OUT : DC Jack
Noise Figure	10 dB maximum
Dimensions (WxHxD)	117 x 31 x 143 (unit:mm)
Power Consumption	1.5 watts
Temperature Range	0℃~40℃
Power Requirements	AC 220-240V, DC7.5 ~ 12V / 300mA + 3-